Amendments to the Claims

This Listing of Claims replaces all prior versions, and listings, of claims in the present application.

Listing of Claims:

1. (currently amended) An installation~~, in particular a vacuum process installation,~~ for processing a substrate~~, in particular a semiconductor wafer,~~ having at least one processing station, ~~characterized in that~~ wherein to hold and/or transport the substrate[[,]] the installation comprises at least one frame with a clamped-in carrier ~~(120; 220; 320; 420; 520)~~, it being possible for the substrate[[,]] to be secured over substantially its entire surface to the carrier, ~~over a large area~~ said processing station comprising a chuck electrode having a surface, the carrier being made of a nonconductive dielectric material having a conductive layer disposed on one side thereof,

said carrier being adapted to be removably positioned adjacent said surface of said chuck electrode so that said carrier and said chuck electrode together form an electrostatic chuck device wherein the conductive layer of said carrier and surface of said chuck electrode form two plates of a plate-type capacitor when positioned adjacently.

2 (canceled)

3 (currently amended) The installation as claimed in claim [[2]] 1, characterized

~~a) in that the carrier consists of a nonconductive dielectric material and is provided with a conductive layer on one side;~~

~~b~~a) in that the frame is conductive at least regionally; and

~~c~~b) in that the carrier is clamped in the frame in such a way that the conductive layer is contact-connected to the conductive region of the frame.

4. (currently amended) The installation as claimed in claim [[3]] 1, characterized in that the carrier is formed by a vacuum-compatible, thermally stable film~~, in particular of polyimide,~~ and the conductive layer is formed by a vapor-deposited metallization or a conductive polymer.

5. (currently amended) The installation as claimed in claim 4, characterized in that the film is from 50-200 μm~~, preferably approximately 100 μm,~~ thick, and the metallization is from 0.03-0.5 μm~~, preferably approximately 0.1 μm,~~ thick.

6. (currently amended) The installation as claimed in claim [[2]] 1, characterized in that the chuck electrode is constructed on a base body which comprises a radiofrequency electrode, the chuck electrode being electrically insulated from the radiofrequency electrode~~, with in particular an insulated leadthrough passing through the radiofrequency electrode being provided for contact-connection of the chuck electrode~~.

7. (currently amended) The installation as claimed in claim [[2]] 1, ~~characterized in that the chuck electrode comprises~~ further comprising a dielectric layer ~~, in particular a plate of aluminum oxide Al.sub.2O.sub.3, which is~~ arranged ~~in such a way that it lies~~ between the chuck electrode and the carrier when the carrier has been positioned ~~parallel and~~ adjacent to ~~the outer~~ said surface ~~(244)~~ of the chuck electrode.

8. (currently amended) The installation as claimed in claim [[2]] 1, characterized in that the processing station comprises a voltage source for applying a voltage between the frame and the chuck electrode~~, it being possible in particular to generate a DC voltage of 200-1500 V, preferably 500-1000 V~~.

9. (currently amended) The installation as claimed in one of claim [[2]] 1, characterized in that the chuck electrode comprises a plurality of regions of different polarity.

10. (currently amended) The installation as claimed in claim [[2]] 1, characterized in that the processing station comprises a gas feed for feeding a gas into a space between the chuck electrode and the carrier~~, it preferably being possible to generate a gas pressure of more than 100 Pa~~.

11. (currently amended) A frame structure for ~~the installation as claimed in claim 1 for~~

holding and/or transporting ~~the~~ a substrate, comprising a frame and ~~characterized in that it is designed to clamp in~~ a film carrier clamped in said frame and being adapted to carry said substrate on a surface thereof~~, particular a film~~ said film carrier being made of a non-conductive dielectric material having a conductive layer disposed on one side thereof, said frame being conductive at least in a region thereof, said carrier being clamped in said frame so that said conductive layer of said carrier is in contact with said conductive region of the frame.

12. (canceled)

13. (currently amended) The frame structure of claim 11, ~~A film which is to be clamped into the frame as claimed in claim 11, characterized in that on one side it has a~~ said conductive layer of said film carrier being ~~, which is preferably formed by~~ a vapor-deposited metallization or a conductive polymer~~, and in that it~~ that is vacuum-compatible and thermally stable, ~~the film substantially being produced from a~~ said non-conductive dielectric material of said film carrier being ~~, in particular from~~ polyimide.

14. (canceled)

15. (currently amended) A method for processing a substrate in a vacuum process installation, wherein:

a) the substrate, in order to be held and/or transported, is secured over substantially its entire surface to a first planar main surface of a carrier clamped in a frame,

b) the carrier is made of a nonconductive dielectric material having a conductive layer disposed at and forming the first main surface thereof,

c) a chuck electrode is arranged with a planar outer surface thereof parallel to and adjacent a second planar main surface of the carrier, the second planar main surface being on the opposite side from the first planar main surface, and

d) the conductive layer of the carrier is connected to a voltage source,

such that the carrier and the chuck electrode together form an electrostatic chuck device, said conductive layer of the carrier and the chuck electrode outer surface forming two plates of a plate-type capacitor~~, in particular a semiconductor wafer, in a vacuum process installation, characterized in that the substrate in order to be held and/or transported, is secured over a large~~

~~area to a carrier in a frame~~.

16. (currently amended) The method as claimed in claim 15, characterized in that the substrate is adhesively bonded to [[a]] the first planar main surface of the carrier by means of a vacuum-compatible and releasable adhesive.

Claims 17-18: (canceled)

19. (currently amended) The method as claimed in claim [[18]] 15, characterized in that the chuck electrode is built on a base body which is formed by a radiofrequency electrode ~~(345)~~, the chuck electrode being electrically insulated from the radiofrequency electrode, and the voltage being applied between the chuck electrode and the frame ~~in particular by means of an insulated leadthrough~~.

20. (currently amended) A method for processing a substrate in a vacuum process installation, wherein:

a) the substrate, in order to be held and/or transported, is secured over substantially its entire surface to a first planar main surface of a carrier clamped in a frame,

b) the carrier is made of a nonconductive dielectric material having a conductive layer disposed at and forming a ~~The method as claimed in claim [[17]], characterized in that the~~ second main surface of the carrier opposite said first main surface ~~is provided with a conductive layer~~,

c) a chuck electrode is arranged with a planar outer surface thereof parallel to and adjacent the second planar main surface of the carrier, ~~and in that~~ wherein a dielectric layer is arranged between the chuck electrode and the second planar main surface of the carrier, and

d) the conductive layer of the carrier is connected to a voltage source,

such that the carrier, the chuck electrode and the dielectric layer between them together form an electrostatic chuck device, said conductive layer of the carrier and the chuck electrode outer surface forming two plates of a plate-type capacitor.

21. (currently amended) The method as claimed in claim[[, 17]] 15, characterized in that a voltage is applied between the frame and the chuck electrode.

22. (currently amended) The method as claimed in claim [[17]] 15, characterized in that to control the temperature of the substrate a gas at a superatmospheric pressure is introduced into a space between the second main surface of the carrier and the planar outer surface of the chuck electrode.

23. (currently amended) The method as claimed in claim [[17]] 15, characterized in that to release the substrate secured to the first planar main surface of the carrier, the conductive layer of the carrier is short-circuited with the chuck electrode.

24. (new) The installation of claim 1, said installation being a vacuum process installation.

25. (new) The installation of claim 4, said carrier being formed by a polyimide film.

26. (new) The installation of claim 6, wherein an insulated lead-through is provided passing through the radiofrequency electrode to provide a contact-connection with the chuck electrode.

27. (new) The installation of claim 7, said dielectric layer comprising a plate of aluminum oxide (Al_2O_3).

28. (new) The installation of claim 8, said voltage source generating a DC voltage of 200-1500 V.

29. (new) The installation of claim 8, said voltage source generating a DC voltage of 500-1000 V.

30. (new) The installation of claim 10, wherein said gas has a pressure of more than 100 Pa.